South Shore Estuary Reserve Council Meeting

October 21, 2020, 10:00 a.m. – 12:30 p.m. Virtual Meeting

Final Minutes

Attending:

NYS Department of State, Office of Planning, Development and Community Infrastructure
Sarah Crowell, Office of Planning, Development and Community Infrastructure, representing NY
Secretary of State Rossana Rosado
Greg Capobianco
Stephanie Wojtowicz
Barbara Kendall

South Shore Estuary Reserve Office:

Jeremy Campbell Sally Kellogg Rachel Neville

Council Members:

Alison Branco, representing The Nature Conservancy
Amani Hosein, representing the Long Island Builders Institute
Brian Schneider, representing Nassau County
Dorian Dale, representing Suffolk County Executive, Steven Bellone
Joe Febrizio, representing City of Long Beach Acting Manager, Robert Agostisi
Lane Smith, representing Reserve Council Technical Advisory Committee
Marty Shea, representing Town of Southampton Supervisor, Jay Schneiderman
Maureen Dolan Murphy, representing Reserve Council Citizens Advisory Committee
Peter Fountaine, representing Town of Brookhaven Supervisor, Edward Romaine
Rich Groh, representing Town of Babylon Supervisor, Richard H. Schaffer
Tara Schneider-Moran, representing Town of Hempstead Supervisor, Don Clavin
Tom Wilson, representing SUNY School of Marine and Atmospheric Sciences, Dean Paul Shepson

Council Advisors:

Brian Foley, NYS Office of Parks, Recreation and Historic Preservation, representing Commissioner Erik Kulleseid

Cassie Bauer, NYS Department of Environmental Conservation, representing Commissioner Basil Seggos

Guests/Other Interested Parties:

Adrienne Esposito, Citizens Campaign for the Environment
Alexa Fournier, NYS Department of Environmental Conservation
Alexa Marinos, Town of Babylon
Artie Kopelman, Coastal Research and Education Society of Long Island (CRESLI)
Chantal Collier, The Nature Conservancy
Emily Sweet, Town of Babylon
Jessie Cohen, Calladium Group
John Tanacredi, Molloy College/CERCOM
Josh Halsey, Peconic Land Trust
Judith Bird, Brookhaven League of Women Voters
Leslie Mesnick, Calladium Group
Maureen Dunn, Seatuck Environmental Association
Michael Bilecki, Fire Island National Seashore, NPS

Michele Golden, NYS Department of Environmental Conservation Rebecca Schuford, NY Sea Grant Robyn Silvestri, Save the Great South Bay Kathleen Fallon, NY Sea Grant 6 call-in users

Presenters:

Brian Schneider, Nassau County
Elisa Picca, Nassau County
Julia Priolo, Suffolk County Department of Health Services
Ken Zegel, Suffolk County Department of Health Services
Mark Finkbeiner, NOAA Office for Coastal Management
Peter Scully, Suffolk County
Sue McCormick, NYS Department of Environmental Conservation
Sue Van Patten, NYS Department of Environmental Conservation

Welcome and Introductions

10:04 am Meeting called to order.

- **S. Crowell** of NYS DOS OPDCI thanked all on behalf of Secretary of State Rossana Rosado for attending. She discussed the SSER Comprehensive Management Plan update. Original public notice date was pushed back from 2019 and impacted by delays from Covid-19. DOS added more information to the CMP on important topics in the Reserve that were not included in the draft. Currently DOS is finishing edits and anticipates moving forward soon.
- **J. Campbell** discussed changes in SSER office. Sherry Forgash has retired and Christie Pfoertner has moved on to a position with DOS OPDCI in Albany. The SSER office is moving forward with developing a new Implementation Status Report (ISR) in the coming months and staff will be contacting stakeholders and Council members to gather information about projects completed in the Reserve that advance the goals of the CMP.

South Shore Estuary Reserve Office Report

R. Neville highlighted outreach efforts performed by SSER office staff since the last council meeting including Estuary Day in 2019 and the virtual event for 2020. SSER participated in Seatuck's alewife monitoring in 2019 and 2020, coordinated a Horseshoe Crab survey site in 2019 and hope to participate in 2021 should the circumstances allow. SSER staff were also able to participate in the 2020 Bay Scallop Bowl hosted by SoMAS and continued to partner with A Day it the Life coordinators and record data for the Carman's River with assistance from Town of Brookhaven.

Nassau County - Nitrogen Reduction Update

S. McCormick briefed the group on the state of the Bay Park Conveyance project. The purpose of the project is to improve water quality and resilience while removing nitrogen to the western bays by conveying treated water from the Bay Park Sewage Treatment Plant to Cedar Creek Water Pollution Control Plant ocean outfall. Other water quality improvement projects for the Western Bays include the Long Beach Consolidation Project, and Point Lookout Sewer Feasibility Study. Benefits of the Bay Park Conveyance project were described including increased storm protection, better quality of life, and the economic benefits. The project is design build which will expedite the process. An outreach firm has been hired, meetings with various stakeholders will be as often as necessary, a website has been created: https://www.bayparkconveyance.org/about and a facebook page will be made in the near future. The preliminary design is done, and the environmental assessment is should be finalized in the next few

weeks. A virtual public meeting will be held in early November, date is TBA. A contractor for the implementation of the project will be selected imminently.

B. Schneider described the treatment process at the Bay Park sewage treatment plant and highlighted the updates that have been made. The effluent is tested for BOD, pH, volatile and semi-volatile organic compounds, suspended solids, metals, nitrogen, phosphorus, chlorine, and coliform which are all below threshold amounts. Upgrades that have been made include BNR level 1 where ammonia can be converted to harmless nitrogen gas which contributes to a 40% reduction in nitrogen output. Sidestream Deammonification is also being implemented, this refers to treating the nitrogen rich water that is removed from sludge. A small treatment plant will be constructed for this process next to the dewatering facility, the process will remove up to 85% of nitrogen from sidestreamflow.

Suffolk County - Nitrogen Reduction Update

P. Scully provided background on the Suffolk County Nitrogen reduction efforts. Many areas of Suffolk county lack sewers and are not an economically feasible solution for all areas. Some funding for sewer projects to neighborhoods adjacent to marshes and buffer areas has been secured as a result of Superstorm Sandy. The areas that will have sewer projects include the Forge, Carlls, Connetquot and Patchogue rivers.

The Suffolk County Subwatershed Wastewater Plan draft was released in Summer of 2019. Primarily, innovative and alternative onsite wastewater treatment systems (I/A OWTS) will be utilized to replace septic systems. Phase 2, current phase, of the plan outlines implementing systems in surface and ground water areas that are ranked priority area 1, that have a 0-2 years contributing area. The Generic Environmental Impact Statement was completed, the statement of findings was approved on March 17, 2020 and indicated no significant adverse environmental effects will occur, results will create clearer surface waters, increasing DO in surface waters and a significant reduction of nitrogen to the aquifer. Nitrogen discharge from onsite wastewater represents the single greatest factor that can be managed to restore and protect our waters from the impacts of nutrient enrichment-related water quality degradation.

Resolution No 702-2020 passed Suffolk County legislature and Board of Health, requiring I/A OWTS for new or expanded construction and revisions submitted to the Office of Wastewater Management on or after July 1, 2021, and to appendix A treatment systems. Exemptions for new or expanded construction for parcels within existing or proposed sewer districts, minor reconstruction and projects with 5 bedrooms or less. Appendix A modified sewage disposal systems increase allowable flow from 15,000 gpd to 30,000 gpd and reduce setback in settings where reduced setbacks can be accommodated. The Subwatershed Plan was approved as a DEC Nine Element Plan.

J. Priolo provided an update to the Septic Improvement Program. A list of approved and provisionally approved I/A OWTS can be found online: https://reclaimourwater.info/Technical.aspx. The efficacies of the systems were discussed. Grant funding is available for homeowners to install I/A OWTS, up to \$30,000 (funding from County and New York State). There have been 3,207 applicants, this number has been steady through the pandemic, and 1,128 approved as of October 1, 2020. At this time, almost all funding has been allocated. Resolution 558-2020 appropriated \$3.7 million for the Septic Improvement Program. Some next steps include developing a sewage treatment plant capacity strategy, continuing the septic improvement program, looking for additional stable and recurring revenue sources, developing long-term monitoring, etc.

NYSDEC - Long Island Nitrogen Action Plan

LINAP is a governor's initiative that focuses on partnerships, partners at every level including federal agencies, state, counties, academia, estuary programs, not-for-profits, and other stakeholders. The goals Page 3 of 6

Reserve Council Meeting Minutes, October 21, 2020

of LINAP include: assess nitrogen pollution in LI waters, identify sources, establish nitrogen reduction endpoints, and develop implementation plans. Program obstacles were described including the loss of two Long Island Regional Planning Council (LIRPC) staff and funding reduction. Current Initiatives were reviewed: water reuse, hydromodification feasibility, groundwater intercept technologies, septic system replacement fund, nutrient bioextraction, fertilizer management, nitrogen smart communities, LIQWIDS, outreach, LI water quality challenge (STEAM), Western Bays Water Quality Monitoring Program. Nitrogen Smart Communities was spearheaded by LIRPC but that staff person has left. There is funding for a pilot program form Long Island Sound Study. Outreach is ongoing, DEC and LIRPC are working together and utilizing several methods including the newsletter, webpages, and social media. LIRPC is running the STEAM challenge, letters of interest for 2020 will be going out in the next month.

Nutrient Bioextraction removes nitrogen and other nutrients from coastal waters by the growing and harvesting of shellfish and seaweed. This initiative is funded through the Long Island Sound Study. A goal of this initiative is to create a self-sustaining industry. A seaweed aquaculture viewer has been released and it shows prospective aquaculture farmers potential sites. A guide to shellfish aquaculture permitting in New York is being created and almost complete. Sugar kelp was tested as a pilot project, there were 3 sites on the south shore last year and kelp grew very well. Kelp was harvested in May 2020 and is being analyzed to identify if undesirable compounds were taken up. LINAP is working with Cornell Cooperative Extension to use the harvested kelp as fertilizer. There will be 3 new sites on the north shore this year. Ribbed Mussels are also being used for a pilot project. Cornell Cooperative Extension of Suffolk County is cultivating the juvenile mussels for this project. Once harvested, the mussels will be analyzed to see what and how much nitrogen and other compounds are taken up. Mussels could be used as commercial animal feed but LINAP is still in the beginning stages.

Hydromodification decreases the amount of residence time water is in an embayment. This is being explored as a water quality improvement initiative. The Shinnecock Bay Study is a Governor's Initiative that looks at environmental impacts, social impacts and cost implications. DOS, DEC and LINAP is involved with and learning from the project. Looking to see if hydromodification could be implemented to improve multiple embayments.

The Solute Transport Model uses Long Island Sound Study funding to contract with USGS to look at legacy nitrogen sources so managers will have accurate information when making decisions. Peconic Estuary Partnership has done this for Eastern Long Island and LINAP will complete this effort for the rest of Long Island. Work Nassau and Suffolk Counties are doing was briefly touched on including the Nassau County Nine Element Plan which is in progress. The Center for Clean Water Technology and Stony Brook University is researching innovative onsite wastewater treatment, nitrogen removing biofilters, constructed wetlands and permeable reactive barriers. LINAP is regularly meeting with the 3 estuary programs. Another ongoing LINAP and USGS project focuses on delineating groundwatersheds for Long Island and determining groundwater recharge areas, travel times and outflows to streams and embayments. More information about LINAP can be found online and through the LINAP newsletter.

<u>SSER Submerged Aquatic Vegetation – 2018 Mapping Project and 2020 SSER Seagrass Workshop</u> <u>Update and Discussion</u>

M. Finkbeiner recognized partners involved in this project which included DOS, Stony Brook University, NPS, GOSR, DEC, Town of Hempstead, Town of Babylon, Town of Islip, Town of Brookhaven, Town of Southampton and Dewberry, Inc. Mapping took place in the intertidal and subtidal areas of the South Shore Estuary but high resolution imagery of the entire Estuary is available. Imagery was taken in May 2018 with optimal water clarity. The mapping and validation methods used were similar to what was done in 2002. Habitats shown in the mapping include emergent tidal marsh, continuous macroalgae, patchy

macroalgae, continuous seagrass, patchy seagrass and mollusk reef (mussel). Products created during this project the mapping of the 2018 benthic habitat, 2018 multi-spectral imagery, the 2002-2018 change dataset, field points data, and underwater and still and video imagery which is available through J. Campbell. There was a significant loss, 50% which equals 14 mi², of seagrass between 2002 and 2018. The bulk of the loss is from continuous beds. There were some areas with seagrass growth. The data collected is suitable for landscape level assessment. The gap between data collection in 2002 to 2018 impedes the ability to fully understand trends in the system. It was recommended to increase frequency in monitoring.

A. Branco gave background to the 2020 Seagrass workshop. TNC and SSER program worked together to bring together a wide variety of stakeholders. The objectives of the workshop were to present the new SSER seagrass maps and change analysis, provide scientific context for the status and observed trends, illustrate a community-based approach to local seagrass protection and management in Long Island Sound, and initiate a discussion on options for seagrass preservation in the SSER. There were several workshop sponsors and almost 100 people registered for the workshop which demonstrated the importance to people. M. Finkbeiner presented the data, B. Peterson discussed seagrass biology and trends, C. Collier discussed Fishers Island community-based management plan, which was followed by group discussions. The participant recommended actions included:

- Improving monitoring frequency, resolution, coordination and use of standardized protocols,
- Obtain groundwater modeling, shoreline hardening/living shoreline, boating impact, commercial fishing gear deployment and seasonal population flux impact data
- Conduct social science to gauge public perceptions of seagrass value and understanding of septic system, fertilizer use and boating impacts
- Form a community-based coalition to initiate local seagrass conservation action; launch the coalition in Southampton and/or Fire Island
- Use community-based outreach and social marketing to raise awareness and appreciation of seagrass and reduce local boating impacts
- Engage citizen scientists in monitoring seagrass condition, water quality and local uses/impacts

The importance of protecting current seagrass habitat was emphasized. A. Branco encouraged the SSER CAC and TAC to help with seagrass efforts, specifically the CAC could support educational components. She also noted SSER staff support and or funding could help kickstart more self-sustaining efforts.

M. Finkbeiner commended B. Peterson's monitoring work and the protocols used. He encouraged others to utilize the methods to expand future monitoring.

M. Bilecki asked if any educational programs have been developed for stakeholders to educate the public about seagrass and management efforts. C. Chantal replied that Fishers Island Seagrass Management Coalition is putting together information about seagrass management areas.

Citizens Advisory Committee Report

M. Dolan Murphy provided update on CAC activities. CAC wrote a letter recommending an increase in the SSER program funding level from \$900,000 to \$1 million. This effort was unsuccessful. The potential Environmental Bond Act was discussed, the group helped draft potential projects if the Bond Act had been passed. There was a break in meetings during the beginning of the pandemic, but virtual meetings began in September. Presentations included bioextraction and the Nassau County Bay Park Conveyance Project. The next meeting will be November 10, 2020 and will have Dr. Christopher Gobler review toxic tides in the SSER. Additionally, individual CAC members supported a request for additional funding for Suffolk County Septic Improvement Program. The 2019 Stewardship Award was recapped, Carl Lobue

and Karen Marvin were Stewardship Award recipients. Lauretta Fischer and Karen Chytalo were recognized for their lifelong contributions to the improvement of the SSER. M. Dolan Murphy thanked everyone for making the 2019 Stewardship Award a success; and thanked Mike Eagan for providing his vessel, The Lauren Kristy, for the boat tour and award ceremony. The 2021 award will move forward.

Technical Advisory Committee (TAC) Report

L. Smith noted the TAC has been meeting virtually. The TAC began two years ago and has recently focused efforts on the Living Resources chapter of the CMP, specifically on SAV. Presentations given during TAC meetings have included the Suffolk County Subwatershed plan, Living Shorelines, Sea Level Rise, SAV and others. The TAC recommends a climate change vulnerability assessment be done for the SSER because the estuary will be significantly affected by climate change. The South Shore of Long Island is expected to receive some of the most dramatic and devastating effects from climate change in the country. These effects include sea-level rise, rising groundwater levels, water, and air temperature increases, ocean acidification, more intense and frequent storm events, and changing precipitation patterns. The goal of conducting this Vulnerability Assessment is to assess to what extent does climate change hamper achieving the goals in the CMP and which goals of the CMP are most vulnerable to being compromised by climate change. Other entities that have climate change vulnerability assessments include FINS, PEP, and Long Island Sound Study. A letter recommending a climate vulnerability assessment has been drafted and will be presented to the Council after this meeting. L. Smith also noted the reason to focus on SAV was because it was a cross-cutting topic that impacted interests of multiple groups. The TAC plans to create an SAV action plan. Work will be built off on the 2009 Seagrass Task Force document and the 2020 SAV workshop results.

D. Dale asked what are the outcomes and timeline for an SAV action plan? How will you work with local groups? L. Smith replied that this is still in the beginning phases of a work plan, but the goal is to bring all the players together to make the most effective use of available resources.

Council Member Updates and Roundtable Discussion

Robyn Silvestri, Save the Great South Bay reported on three programs. Creek Defenders was conducted during the pandemic while adhering to health and safety protocols. The Bay Friendly Yards certification program encourages the use of native plants to restore habitat in combination with stormwater management and bay friendly maintenance techniques. The Great South Bay Oyster project was recently launched, 5,000 oysters were purchased from farmers with the goal to keep oysters in the bay and not be harvested to improve water quality.

The meeting adjourned at 12:37.